

Welcome to our Spring 2017 newsletter! As the snow begins to melt, we are looking forward to returning salmon, new cubs of the year, and a busy season of conservation and education. We hope to see you out on the Refuge or in the community - best wishes for a great summer!

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## **Kodiak Refuge Staff**

Mike Brady - Manager
Tevis Underwood - Deputy Manager
Hans Klausner - Supv. Park Ranger
Bill Pyle - Supv. Wildlife Biologist
Cinda Childers - Clerk
Lecita Monzon - Permit Technician
Bill Leacock - Bear Biologist
Robin Corcoran - Avian Biologist
Jeff Lewis - Vessel Operator
Jeff Hicks - Pilot/Law Enforcement
Kevin VanHatten - Pilot/Fish Biologist
Darrell Fox - Maintenance
Ava Kahn - Visitor Center Manager
Shelly Lawson - Education
Lisa Hupp - Outreach

Farewells over this past year: Brian Hansz, Anne Marie LaRosa, Tonya Lee, and Kurt Rees



Kodiak Refuge staff and volunteers in costume with grand-prize-winning float at the 2016 Crab Festival.

# **New Refuge Manager: Michael Brady**

We're pleased to welcome a new Refuge Manager this April! Mike Brady and his family are excited to move back to Alaska and are looking forward to a new adventure in Kodiak. Most recently, Mike has served as the Project Leader for the Hopper Mountain National Wildlife Refuge Complex and Condor Recovery Program in Ventura, California. He has also worked as the Deputy Wildlife Refuge Manager for Alaska Peninsula/Becharof NWR, and has experience with several other wildlife refuges around the country. His wife, Stephanie Brady, is the current Chief of Planning for the Alaska region of Fish and Wildlife Service. Following in the family footsteps, their son Dylan is a freshman studying wildlife at the University of Montana, Missoula.

# MANAGER Q&A

Q: What first got you interested in wildlife conservation/management?

My Dad was a high school
Biology/Physics and Chemistry
teacher, so I had a good start. I
remember getting a subscription
of Ranger Rick at a very early
age. I became very interested in
birding and being able to tell the
difference in birds by shape and
color, spending hours with field
guides. I spent summers at my
grandparents' house on Cape Cod
in Massachusetts, snorkeling
everyday and catching all kinds of
sea creatures in the Atlantic.

Q: What are you looking forward to about moving back to Alaska?

We currently live just north of Los Angeles, so less noise and traffic and more stars! Alaska also offers experiences you can get nowhere else in the lower 48. And, of course, salmon.

Q: What interested you about working in Kodiak?

I really enjoy coastal seabirds and shorebirds specifically, and am most comfortable in the marine environment. Although I have moved around a lot in my Service career, we have always been able to stay coastal. I also look forward to working with the staff and integrating into the local community and surrounding villages.

Q: A favorite thing to do outside?

Our favorite thing to do is to travel, anytime and anywhere. We enjoy backpacking and camping.

Q: Favorite book, conservation hero, or musician?

Books: Cape Cod by Thoreau and Two in the Far North by Murie

Conservation heroes: Theodore Roosevelt and Aldo Leopold

Favorite musician: Bob Dylan (even his new Frank Sinatra remakes).

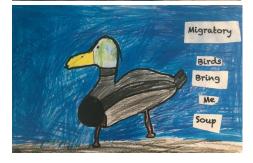
And, of course, salmon..

# Migratory Bird Calendar Contest

This annual statewide contest engages youth in rural schools to share their perspectives of migratory bird conservation through art and literature.







We received 44 eligible entries from 3 Kodiak villages, and were delighted by the talented and thoughtful submissions!

Our 5 judge panel selected 12 finalists to progress to the state competition in Anchorage.

Congratulations to all our finalists, and to Ruby and Claire Taylor, featured as Manager's Picks!

2018 theme: "Migratory Birds Bring Me \_\_\_\_\_."

food sounds
opportunity joy
dreams of flying
ocean beauty
songs happiness
Soup



#### Kodiak Finalists

Ruby Taylor
Rena Ashouwak
Aundria Ignatin
Evan Bechtol
Celeste Chase
Freya Larionoff
Bayley Rowland
Summer Nelson
Alyssa Mullan
Claire Taylor
Tina Covarrubias
Celeste Chase





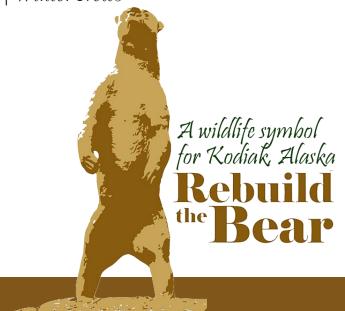
### **Youth in Action**



Kodiak Refuge Youth Conservation Corps veteran **Josh Barnes** and volunteer Youth Leader **Nia Pristas** were selected as presenters for the 2017 AK Forum on the Environment and also attended a youth leadership development workshop. Their presentation got rave reviews, and of course they taught all of the participants the salmon song!

**Jackie Keating**, Kodiak Refuge seasonal park ranger, completed her thesis on Kodiak bear viewing management and received a MS in Sociology degree from Utah State University.

Katie Stoner, 2016 crew leader for Kittlitz's murrelet research, won first place for Best Undergraduate Presentation at the 2017 Pacific Seabird Group conference, presenting on the nesting ecology of Kittlitz's murrelets.





Since September 2015, the Kodiak
Brown Bear Trust has led a diverse
team of community members and
organizations in a successful effort to
raise funds for and commission a new

bronze sculpture to replace the crumbling historic "Madsen Bear" statue.

The new sculpture will be more permanent and weatherproof, a statue that will continue to greet visitors, honor our history, and serve as a reminder of our communities' efforts to live in harmony with the majestic Kodiak bear.

# A bear in bronze...

#### A Kodiak Icon

The Madsen Bear statue was originally commissioned by Alf Madsen to honor his father, Charles Madsen - Kodiak's first registered bear guide. For more than 60 years, this Kodiak icon has stood in welcome to all who visit and live on our island. It survived the 1964 tsunami that devastated downtown, and over the years moved to a number of locations around Kodiak,

including the Harbormaster's building. The Refuge has been very honored to host the statue for the City of Kodiak over the past five years at the corner of the Refuge Visitor Center.

We bid fond farewell to the beloved Madsen Bear statue this January, as it moved to an indoor location away from harmful weather. Thank you to City staff and Brechan Enterprises for the successful move!



## **Final Stages of the New Bear**

Over the past year, several local bear experts have consulted with sculptor Stan Watts to design a realistic standing adult male bear at slightly larger than life size. First sculpted in clay, then cast in fiberglass, the final stages of the statue production are currently underway: creating the porcelain mold and the final bronze casting. Stay tuned for updates on arrival and celebration this summer!





## 5 | Coming Up

## **Subsistence Migratory Bird Harvest for Kodiak**

Seabirds: April 2-June 30 & July 31-August 31

All other birds: April 2-June 20 & July 22-August 31

#### Know before you go!

- Eligibility
- License
- Means and methods\*
- Restricted areas
- Restricted species

\*No lead shot may be used. Lead can be toxic to wildlife & people.
Possession of lead shot carries a fine of \$250.

We have updated our website with some helpful fact sheets for 2017:  $\underline{http://bit.ly/2pvayZa}$ 

Regulations are set through the Alaska Migratory Bird Co-Management Council, and an annual regulations pamphlet can be found at: <a href="https://www.fws.gov/alaska/ambcc/Regulations.htm">https://www.fws.gov/alaska/ambcc/Regulations.htm</a>

# Kodiak Area Marine Science Symposium (KAMSS)

## April 18-21 Kodiak Harbor Convention Ctr

Sponsored by the Alaska Sea Grant Marine Advisory Program, KAMSS provides a forum for researchers to share findings within the research community and to the public.

There is no charge for attendance, but participants are encouraged to register in advance:

http://bit.ly/2ozp6dz

## We'll be there! Look for:

Two presentations by Robin Corcoran, Refuge avian biologist: "Dead Birds on Beaches, the Seabird Die-off of 2015-16: A Kodiak Perspective" & "Kodiak National Wildlife Refuge Marine Bird Monitoring and Research."

A presentation by our local youth leaders, Nia Pristas and Josh Barnes:

"Youth Leaders in Salmon Education"

A collaborative poster with USGS:

"Food, disease, and migration: how Emperor Geese fare in the Kodiak Archipelago"

# **Ursa Major II Open House**

Captain Jeff Lewis and Refuge staff will visit Old Harbor this spring, bringing a floating visitor center aboard the Refuge research vessel, the Ursa Major II. Stay tuned for scheduled dates in late April / early May.







Cruise Ships: May 5, 16, 23, 26, <u>&</u> 31 We look forward to greeting the first cruise ships of the year!

#### **May 20: International Migratory Bird Day (IMBD)**

Join us for a special event to celebrate birds! Build a bird feeder and enjoy a live bird presentation from the Alaska



Bird Treatment and Learning Center: Co-hosted with the Kodiak Audubon Society.

#### **Closed for Seasonal Training**

During early to mid-May. Check our website and Facebook page for schedule updates.

We will be busy training our new crew of seasonal and local volunteers and staff - everything from Kodiak natural history to bear safety! Many thanks to our community partners who assist with orientations, presentations, and tours.

#### **Summer weekly programs at the Visitor Center**

Join our education and interpretation programs! Check our website and Facebook for updated program information.

- Families Understanding Nature (FUN) for toddlers and their families. Stories, arts, and activities around a new nature theme each week. Changing from Wed. to Tues. for the summer! Wildlife Investigation Learning & Discovery (WILD) for ages 6-12, investigating a different topic each week in the summer.
- Happy Trails for explorers of all ages in the summer, meeting at a different location around Kodiak each Saturday.



## Pop-Up Salmon Camp

Last year we "hit the pavement" with Salmon Camp, setting up outdoor learning activities at Main Elementary School after a summer lunch program. Nearly 100 children joined in! Read more about the first ever pop-up Salmon Camp here:

http://bit.ly/2oDfdI0

#### SALMON CAMP SCHEDULE

Session 1: June 5th-9th Session 2: June 12th-16th Session 3: June 26th-June 30th Session 4: July 3rd-July 7th Session 5: July 17th-21st Session 6: July 24th-July 28th Session 7: August 7th-August 11th

#### **Rural Communities Schedule**

(Tentative dates) June 20th-21st -Akhiok and Old Harbor July 10th-11th -Larsen Bay and Port Lions August 1st-2nd -Ouzinkie and Karluk

Questions about Salmon Camp? Ask Shelly Lawson, Ed. Specialist: michelle lawson@fws.gov

As Kodiak bruins begin to emerge from winter dens, we can all practice bear awareness to keep people and bears safe!

- Check around your home to minimize bear attractants. Secure garbage, use an electric fence around chicken coops and active smokehouses, bring pet food inside, clean outdoor grills.
- Prepare for possible bear encounters. Learn about bear behavior and local bear activity, rehearse a calm response to a possible encounter, and carry a deterrent that you know how to use.
- Avoid surprising bears. Make noise by talking or singing, travel in a group, stay aware of your surroundings, slow down and be extra alert in areas with low visibility and high noise, like brushy streambanks.

**Keep a clean camp.** Secure food and garbage in resistant containers or high in trees, use an electric fence around your camp.

 Give bears space. Never approach a bear, pay attention to behavior that indicates you are too close, slowly back away to increase distance.



# Help STOP the spread of invasive species!



Orange hawkweed is Kodiak's most famous invasive plant. You can stop the spread of hawkweed by cleaning boots, clothing and equipment that has been in an infested area, and by not picking the flowers and transporting them to new locations.

Invasive species can spread aggressively, wiping out other important native flora and fauna. Kodiak Refuge works with partners to monitor and eradicate harmful invasives.

#### **Common Invasives in Kodiak:**

orange hawkweed
bohemian knotweed
creeping buttercup
oxeye daisy
(formerly Canada) thistle
signal crayfish
Stop by the Visitor Center for
invasive ID info.



Flying into the Refuge this summer? Be our eyes on the ground! Take a photo and some notes about location of plant, and report to:

Bill Pyle, Wildlife Biologist bill\_pyle@fws.gov 907-487-0228

# Life on the Rocks

High on the steep slopes of southwest Kodiak Island, a camouflaged camera silently snaps photo after photo. Through fog, rain, mist, and sunshine, images emerge of a life that begins on the rocks and eventually takes flight for the sea.

The Kittlitz's murrelet (KIMU for short!) is a rare and mysterious Alaskan seabird that lays a single egg in some of the most remote terrain imaginable. KIMU population declines from 1980-2000 prompted research into possible causes, especially looking at challenges to nest success. Better understanding of these birds may also give clues about the bigger picture of marine ecosystem health.

Since 2008, biologists have used game cameras to study the fate of Kittlitz's murrelet nests on Kodiak National Wildlife Refuge. Of 146 discovered nests, 107 cameras have captured nearly 2 million photos over nine years.

Although not every Kittlitz's nest experiences each of the following events, these photos give you a glimpse of life on the rocks for a young KIMU chick.





It all starts with an egg (me!). In late May to early June, my parents lay one egg in a small bowl made of rocks. This nest bowl is located on a steep mountain slope covered in loose rock known as scree habitat. The color of the egg looks kind of like mint chocolate chip ice cream — it is camouflaged to make me hard to find. Can you spot me?

story by Katie Stoner/Lisa Hupp



Both of my parents take approximately 24 hour shifts incubating me. They switch in the early morning: one parent flies off to the ocean to eat while the other parent hunkers down against the rocks to keep me warm and protect me from predators.



No matter how hard we try to be invisible on the slopes, sometimes predators like the red fox come and take away eggs or chicks. Predators cause nearly half of our nests to fail on Kodiak, and the red fox is the main offender

Read more about the Kittlitz's murrelet on our website! Life on the Rocks Story: <a href="http://bit.ly/2oEdB00">http://bit.ly/2oEdB00</a>
Species Profile: <a href="http://bit.ly/2ogpwWr">http://bit.ly/2ogpwWr</a>
Refuge Research Studies: <a href="http://bit.ly/2mT07Z5">http://bit.ly/2mT07Z5</a>

# **Terns Among Us...**

Both Arctic and Aleutian terns call Kodiak home, nesting in colonies along our beaches and coastline. Both species have significantly declined in coastal Alaska over the past few decades, and the Kodiak Refuge will begin a research study this year to monitor local colonies on the road system.

# Read more: http://bit.ly/2nXiCV4

Photos by Robin Corcoran

# You Can Help Baby Terns!

Eggs and nests are camouflaged on beaches - they are easily crushed. If adult birds are disturbed on a nest, they may leave their young alone and vulnerable. If you are on a beach with a tern colony, you can help nests and chicks survive:

- watch your step
- leash dogs
- avoid operating ATVs
- If you are being divebombed, you are too close to a nest; carefully move away.

# TERN NESTING AREA PLEASE DO NOT DISTURB NESTING TERNS Aleutian and Arctic Terns are sensitive to disturbance. Disturbance can prevent birds from caring for their young. When disturbed, adults flee, leaving nests exposed to the elements and predators, and young can become separated from adults. EGGS AND NESTS ARE CAMOUFLAGED-IT IS EASY TO CRUSH THEM! IN TERN NESTING AREAS: --Vatch your step -leash dogs -Avoid operating ATVs



# Life on the Rocks continued...



After my first month as an egg, I'm ready to hatch. My parents must still keep me warm, brooding me as I adjust to the world.



I try to act tough when visited by larger neighbors like this curious Sitka blacktailed deer...



A few days later I am left alone for the first time as a chick. My parents head out to sea... and return with fish for me to eat!



Just before I am ready to leave the nest....poof! I lose all my baby down to reveal juvenile plumage.



They bring back long, skinny Pacific sand lance or fat, juicy capelin — small forage fish from the ocean.



About 55 days after I started life as a single egg among the rocks, I am ready to leave the nest and fly toward the ocean to find my own fish. I fledge!

#### **Anticipated 2017 Biology Projects:**

Working with partners, we plan the following surveys and studies. Bear Abundance and **Composition Monitoring** through intensive aerial surveys and stream surveys collects long-term data on bear populations. The third year of a Berry Monitoring survey will study the abundance and timing of berries important to brown bear diet. A Sockeye Salmon **Escapement** survey continues on the Akalura River. Water **Temperature Monitoring** for critical salmon habitat is ongoing at several lakes and rivers in the Refuge. Also ongoing is the Seabird Nesting Colony Survey, and a new research project will investigate Arctic and Aleutian Tern Nesting Ecology. Local volunteers will assist with annual and biannual monitoring of landbirds through the **Monitoring Avian Productivity and Survivorship** citizen science program, Alaska **Landbird Monitoring Survey** and Breeding Bird Survey. A collaborative aerial Mountain Goat survey is planned for midsummer.

# In the Field...

May is the start of our busy field season! Seasonal technicians and volunteers arrive, complete training, and work with their project leaders to prepare for days to weeks in remote field locations. Through monitoring and research, we can better understand the habitat and wildlife of Kodiak Refuge... and prepare for future changes and challenges.





# **Recent Publications & Reports**

Corcoran, R.M. 2016. Nearshore Marine Bird and Mammal Surveys in the Kodiak Archipelago, 2011-2013. Refuge report no. 2016-1

Corcoran, R.M. 2017. Aleutian and Arctic Tern colony monitoring, Kodiak Archipelago, 2016. Refuge report 2017.2

Deacy, William, William Leacock, Jonathan B. Armstrong, and Jack A. Stanford. "Kodiak brown bears surf the salmon red wave: direct evidence from GPS collared individuals." Ecology 97, no. 5 (2016): 1091-1098.

Deacy, William W., William B. Leacock, Lisa A. Eby, and Jack A. Stanford. "A time-lapse photography method for monitoring salmon (Oncorhynchus spp.) passage and abundance in streams." PeerJ 4 (2016): e2120.

Knudson, T.W., R.M. Corcoran, J.R. Lovvorn, J.L. Piatt, and W.H. Pyle. 2016. Breeding Ecology and Behavior of Kittlitz's Murrelet in Kodiak National Wildlife Refuge, Alaska: 2015 Progress Report. Refuge report 2016.3

Pyle B, Hernandez D. 2016.

Development of protocols for monitoring relative abundance of berries important to brown bear of the Kodiak Archipelago, Alaska: pilot study progress report. Refuge Report 2016.2

VanHatten, G. K. 2017. Estimating Adult Sockeye Salmon Escapement into Akalura Lake using a remote video and time lapse system, Kodiak National Wildlife Refuge, Alaska: 2014 progress report. Refuge Report 2017.1

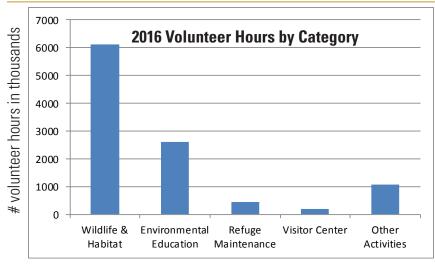
Reports available on our website: www.fws.gov/refuge/kodiak



# **Kodiak Refuge 2016 Volunteer Report**



Volunteers serve Kodiak Refuge and Kodiak's communities in many ways. Local volunteers support special events, citizen science, public use cabin maintenance, environmental education, and the visitor center. Seasonal volunteers bring special expertise and a major time committment to support vital programs like Salmon Camp, biological research, and visitor center staffing. Youth contribute a significant portion of Kodiak's volunteer hours each year.











#### **Number Highlights:**

- 31 youth volunteers (under age 35)
- 16 seasonal volunteers (3+ month full time)
- 1,060 hours for exhibit preparation by pro photographer
- 1,100 hours donated by single biology volunteer

**Total Volunteers: 50** 

Value of Time: \$276,448.00

**Total Hours Contributed: 10,432** 

#### **Local Volunteer Opportunities**

Get involved and make Kodiak Refuge yours! Contact Lisa for full info on opportunities and training: lisa\_hupp@fws.gov.

#### **Kodiak Road System:**

Visitor Center Docent, ages 16+ Bird Banding (MAPS) ages 15+ Salmon Camp Instructor Aide (KRYL, application required, 15-18)

#### **Kodiak Refuge:**

Cabin Stewardship Program Invasive Plant Removal Biological Program Assistance (as-needed basis)

# Volunteer in 2017

#### **Training Opportunities**

For on-Refuge projects, please see Field Training Schedule. If you would like to assist at the Visitor Center, you may wish to join selected sessions of our seasonal staff training from May 8-19. For initial training in bird banding (MAPS), please attend the first session of the summer in June. Training for KRYL is a 2 hour session prior to the start of Salmon Camp.

#### **Field Training Schedule**

# Required: Bear Safety

4 hour course. Recertify every 3 yrs Offered April 26th & May 15th

Basic Aviation Safety A-101 & 104 Self study online courses. Recertify every 2 years.

#### "Dunker" Aviation Training

8+ hour course. Recertify every 2 yrs Classroom: May 19th 3:30-7:30pm Practical: May 20th 8:30am-1:30pm

**Optional:** 

Firearms (1 shooter per group min.) 8 hour course. Recertify annually Full course offered May 17th 12 | Just for Fun

# **SCAT Cookies:** fun & educational treats!

What can we learn from animal scat? SO MUCH! Biologists analyze scat to learn more about an animal's diet and the overall health of an ecosystem or habitat. Hikers and hunters can also take a closer look at scat using it as a clue to learn more about an animal's habits.

This winter, we developed a new youth education program that teaches scat science to help students increase their bear awareness and safety. Putting analysis into practice required some creativity... so our staff turned to the scat cookie!

You can design your scat cookies to be either edible or non-edible. Here are the basics:

- Find a no-bake cookie recipe
- Decide which animal's scat you want to replicate
- Make the cookies and add in the extras: berries, nuts, and jerky can be used for an edible version, while grass, bones, and fur can create a realistic but non-edible cookie.
- Spoon out cookies on waxpaper lined baking sheet in general shape and size of chosen scat. Let cool.
- Refine your cookie's shape by rolling or molding in your hand like play dough.







Sample No-Bake Recipe

2 cups sugar 1/2 cup milk 1 stick (8 tbl) unsalted butter 1/4 c. unsweetened cocoa powder 3 cups old fashioned oats 1 cup smooth peanut butter 1 tbl pure vanilla extract large pinch kosher salt.

Line a baking sheet with waxed paper.

Bring the sugar, milk, butter and cocoa to a boil in a medium saucepan over medium heat, stirring occasionally, then let boil for 1 minute. Add the oats, peanut butter, vanilla and salt and stir to combine.

**Drop spoonfulls onto lined baking** sheet, let sit at room temperature until hardened, about 30 minutes.

Recipe from Food Network Kitchen

Kodiak National Wildlife Refuge 1390 Buskin River Road Kodiak, AK 99615 907/487-2600 www.fws.gov/refuge/kodiak



Questions or suggestions for our fall newsletter? Contact Lisa Hupp, **Outreach Specialist:** lisa hupp@fws.gov 907/487-0285